



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,452	09/05/2003	Frank Taormina	PD-980042D	1452
20991	7590	04/20/2006	EXAMINER	
THE DIRECTV GROUP INC			DINH, TIEN QUANG	
PATENT DOCKET ADMINISTRATION RE/R11/A109			ART UNIT	
P O BOX 956			PAPER NUMBER	
EL SEGUNDO, CA 90245-0956			3644	

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/657,452	TAORMINA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Tien Dinh	3644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>9/03, 10/03, 7/05</u> .   | 6) <input type="checkbox"/> Other: ____.                                    |

## DETAILED ACTION

### *Election/Restrictions*

Applicant's election of group II in the reply filed on 4/6/05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 1-7 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 4/6/05.

### *Claim Rejections - 35 USC § 112*

Claim 19 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 19, it is not understood what "more current technology" mean. How does it make the technology more "current"?

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 8-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 8, "at least one ground terminal" is a double inclusion of element: Are there more than one ground terminal or are there two? Please explain.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-15 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Draim in view of Densmore et al and McLeod.

Draim discloses at least four position adjustable satellites that are on MEO and on the equatorial plane and spaced apart but is silent on the fixed one-dimensional antenna and the two dimensional tracking antenna. However, Densmore et al teaches that two dimensional tracking antenna on a ground terminal is well known. McLeod discloses that one dimensional antenna on a ground terminal is well known.

It would have been obvious to one skilled in the art to have used fixed one-dimensional antenna and the two dimensional tracking antenna with the ground terminal in Draim's system as taught by Densmore et al and McLeod to allow the communication system to send information to desired spots and to keep track of the whole satellite system.

Please note that Draim discloses satellites that are spaced apart that other satellites can be interleaved therebetween.

Please note that the ground terminal being fixed is well known. Please also that a terminal can be fixed since this merely involves routine method that one skilled in the art can use to make sure the terminal doesn't move.

Please note that ground terminal that provides network operational control/satellite position control/communication link is well known in this day and age. One skilled would have used ground terminal that provides network operational/satellite position control to allow the satellite to safely and efficiently provide signals to the desired spot.

Claims 8-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stuart et al in view of Densmore et al and McLeod.

Stuart et al discloses at least four position adjustable satellites that are on MEO and on the equatorial plane and spaced apart but is silent on the fixed one-dimensional antenna and the two dimensional tracking antenna. However, Densmore et al teaches that two dimensional tracking antenna on a ground terminal is well known. McLeod discloses that one dimensional antenna on a ground terminal is well known.

It would have been obvious to one skilled in the art to have used fixed one-dimensional antenna and the two dimensional tracking antenna with the ground terminal in Stuart et al's system as taught by Densmore et al and McLeod to allow the communication system to send information to desired spots and to keep track of the whole satellite system.

Please note that Stuart et al discloses satellites that are spaced apart that other satellites can be interleaved therebetween.

Please also note that the ground terminal being fixed is well known. Please also that a terminal can be fixed since this merely involves routine method that one skilled in the art can use to make sure the terminal doesn't move.

Please also note that ground terminal that provides network operational control/satellite position control/communication link is well known in this day and age. One skilled would have used ground terminal that provides network operational/satellite position control to allow the satellite to safely and efficiently provide signals to the desired spot.

Please note that there is a second plurality of satellites interleaved between the four satellites to increase the elevation angle. See figures 14-15. The second plurality of satellites are inclined.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Palmade et al teaches satellites.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tien Dinh whose telephone number is 571-272-6899. The examiner can normally be reached on 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teri Luu can be reached on 571-272-7045. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3644

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TD

A handwritten signature in black ink, appearing to be "Tim" followed by a stylized flourish.